Output:
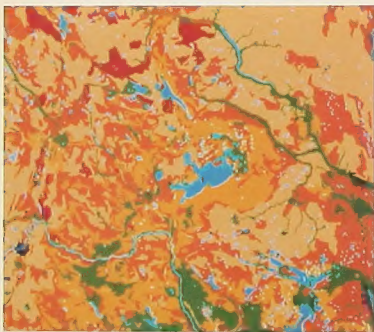- provides information in tabular form on wide range of topics (e.g. areas of permafrost in northern Manitoba)
- provides data in map form on variety of topics, at any required scale. Maps produced in black and white or color
- prepares tabular and map information for direct input to other data systems such as Statistical Package for Social Sciences.

Standard Products

Information available in printed or digital form for CLI data by:
- province
- county or census division
- municipality
- enumeration area
- watershed
- National Topographic Series maps

User training

Most data can be retrieved from CLDS using a terminal and simple commands requiring only a little computer training.

Formal and informal training sessions, tailored to meet user needs, are available.

Future Developments

Research is under way to link Canada Land Data System with other geographic information systems and satellite data sources, and to enhance color map production.

Access

Map data are available from graphics terminals at Lands Directorate offices in Ottawa, Halifax, Quebec City and Burlington as well as at the Alberta Department of the Environment in Edmonton, the University of Manitoba in Winnipeg, and the Newfoundland and Labrador Computer Services in St. John's.

Tabular information can be retrieved from terminals anywhere in Canada via telephone links.

Cost

Processing costs depend on user requirements. Cost estimates are available on request.

For more information on CLDS contact:

Canada Land Data System
Lands Directorate
Environment Canada
Ottawa, Canada K1A 0E7

Phone: (819) 997-2510

Lands Directorate
Quebec Region
Environment Canada
P.O. Box 10100
Ste-Foy, Quebec G1V 4C7

Phone: (418) 694-4613

Lands Directorate
Pacific and Yukon Region
Environment Canada
1001 West Pender Street
Vancouver, British Columbia
V6E 2M7

Phone: (604) 666-3161

Lands Directorate
Atlantic Region
Environment Canada
P.O. Box 365
Halifax, Nova Scotia B3A 2Y3

Phone: (902) 426-4196

Lands Directorate
Ontario Region
Environment Canada
Box 5050
Burlington, Ontario L7R 4A6

Phone: (416) 637-4551

Canada Land Data System

Environment Canada

Lands Directorate

Environnement Canada

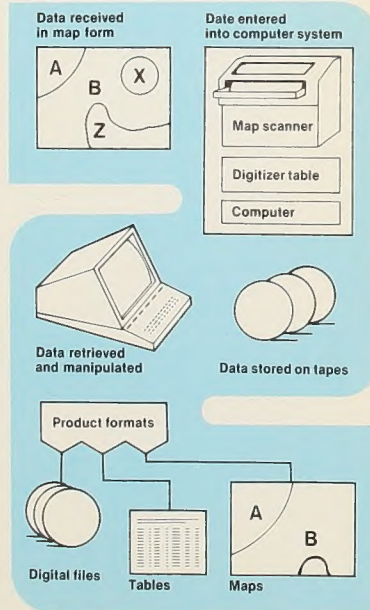Direction générale des terres

CLDS
Canada Land Data System

CLDS

CLDS

CLDS

CLDS

Canada Land Data System (CLDS) is a computer system which handles land resource information. CLDS can manipulate and produce land data in various forms to facilitate effective land use planning and management at all levels: national, provincial, regional, municipal.

CLDS, through its main component, Canada Geographic Information System (CGIS):

- stores • manipulates • analyzes • provides access to physical, biological, social and economic information on Canada's land resources.

CGIS function:

Data received in map form

A B X Z

Date entered into computer system

Map scanner

Digitizer table

Computer

Data retrieved and manipulated

Data stored on tapes

Product formats

Digital files Tables Maps

Types of information available

Canada Land Data System provides access to:

- more than 3 000 digitized maps. These maps include those of the Canada Land Inventory, which detail land capability for forestry, agriculture, recreation and wildlife — waterfowl and ungulates — for one-third of Canada
- unpublished Canada Land Inventory land use maps
- updated land use data for specific areas
- 1971 and 1976 census and administrative boundaries
- watershed boundaries
- pollutant transfer maps
- information on federal land holdings
- ecological land data for various areas
- other land data.

An index of information available can be obtained from the Lands Directorate which administers the system (address on last panel).

Demonstrated uses

Clients such as provincial and federal government departments, crown corporations, universities and various land survey groups use this computerized land data system for:
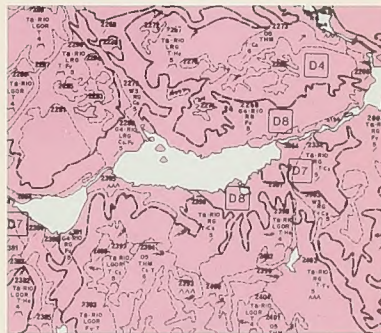
- land use planning and monitoring
- measuring shorelines
- federal land management
- defining areas of conflict between competing resource uses
- national parks planning and management
- linking census data to other types of information
- environmental impact studies
- ecological land evaluation
- coastal zone studies
- country-wide summary of land capability and uses
- creating data for input into other geographic information systems.

CLDS services

Input:

CLDS converts land data for entry into data base quickly, accurately and at low cost using digitizing process. Data digitized by:
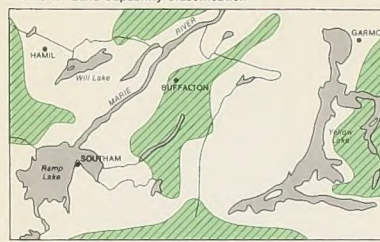
- *map scanner:* main method used, automated, capable of handling large numbers of maps. CGIS was first operational system to use this method routinely for converting map data
- *Automap:* data displayed on terminal screen for immediate verification, editing and update.

Manipulation of data base

- combines maps to produce Canada-wide data base
- compares maps of different scales
- defines study areas with great flexibility
- retrieves data for user-defined study areas
- calculates areas and perimeters of map units
- calculates length of shorelines
- compares various data for any area by overlaying maps of different themes.

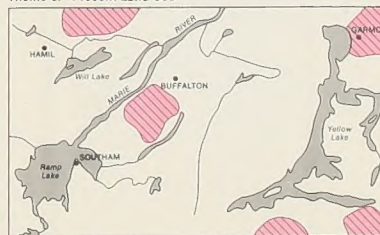**Theme 1. Land Capability Classification**

High capability agricultural land
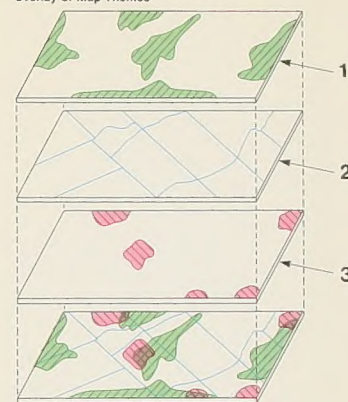
Theme 2. Census Boundaries

Theme 3. Present Land Use

Mine tailings disposal areas

Overlay of Map Themes

1
2
3

Final Product

Mine tailings disposal areas on high capability agricultural land